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LECTURES.

BOSTON CITY HOSPITAL: CLINICAL LECTURE.

BY DAVID W. CHEEVER, M. D.,
Professor of Clinical Surgery in Harvard University.

GENTLEMEN, — The first case I have to bring before you is that of a girl ten years of age. This is a supposed case of assault, committed by some unknown man. Such a charge should always be accepted with a grain of allowance because of the excitement of the child, or because parents may be disposed to quarrel with a neighbor, and so bring a suit against him on a false accusation of rape. In these cases we cannot be too careful. Children of tender years do have vaginitis as a result of worms or of masturbation. It may cause adherence of the nymphæ. There is, at any rate, a spontaneous vaginal discharge, and upon this are based suits which involve innocent persons, the child having had nothing to do with men. This child was first admitted to the hospital September 1st. She then had swelling of the labia and two sores on each side of the vulva. It is sometimes difficult to distinguish specific from ordinary sores, and the character of these may not then have been suspected. They were treated by sundry applications and rest, and the child was discharged well. On the 28th of November she was again brought to the hospital. Several days of careful cross-examination and cautious inspection of the affected parts have led to the discovery that while gathering chips on a wharf the child was violated by a stranger. This is the only history we have obtained from her. Two days ago I found a large fringe of condylomata around the anus, the remains of sores on the vulva, and, stranger still, a sore in the corner of the mouth. It is a well-marked case of secondary syphilis. In their medico-legal bearings such cases make it necessary to decide the question as to whether syphilis be present. We must try to determine whether the sore in the mouth be another primary chancre or a part of the constitutional affection. Yesterday another sore appeared in the opposite corner of the mouth, and there is now no doubt that both are secondary. If the patient were left long enough without treatment we should see sore throat. The affection of the mucous

membrane begins in white patches, especially at the junction of the mucous membrane and the skin. By friction and movement these patches develop into sores, yet chancre in the corner of the mouth is not unknown, and is followed by enlargement of the cervical lymphatics similar to bubo.

The treatment of a case like this should be mercurial. But in what form? Some writers recommend the chloride. It is a good remedy in chronic cases, but in my experience is slower than calomel. The protiodide is also good, but, of late, I rely more upon calomel than upon any other compound of mercury.

I now show you the child. Here are maculæ and condylomatous patches about the anus. One patch is above the skin. There are dark maculæ on the legs, and, as I shall show you, also on the rump. Here is a very distinct mucous patch on the vulva, and here are others; also the remains of chancres, as well as small vegetations on the labia. Finally, there are condylomata of mild type in each corner of the mouth.

I propose to give the child two grains of calomel daily, that is, one grain twice a day, combined with opium to prevent action of the mercury on the bowels. The condylomata, by the aid of dryness and powdered calomel, will get well. When they are large and moist, I use chromic or nitric acid. But in those which are thin and flat, dryness and the calomel powder answer every purpose. How far should the internal treatment be pushed? Until the gums are slightly spongy and the breath has the mercurial odor. When this condition is reached I shall reduce the calomel to one grain daily. In those instances in which the mouth becomes sore before we know it, a mouth wash of the chlorate of potash is needed. Under this treatment the child's skin and mucous membrane will probably clear up and get well.

In the hereditary syphilis of children, to give mercury by inunction is a good treatment, but care is necessary, because the mercury is sometimes absorbed very quickly. Rub the ointment into localities in which the skin is thin, as the armpits and groins.

Necrosis. — Our second case is that of a boy too young to give us his history, and there is no older person to do it for him. What is to be thought of this leg? In what does it differ from the left? Is it larger or smaller? Is it softer or harder? It is larger and harder than the other, and this is due to enlargement of the bone. What bone? The tibia, as we can see by bending the knee. Here is an open sore with pouting lips situated near the head of the tibia; also several scars, some of which are dimpled. A dimpled scar is caused by adherence of the skin to the bone, and is a sign that the sore, of which it is the cicatrix, penetrated to the periosteum and probably involved the bone. On passing my probe into the open sore, I find that it enters some distance into the shaft of the bone, thus showing an affection of the medullary

cavity. What is the character of the disease? Is it caries or necrosis? The child is scrofulous, and has scars and open sores. Caries is more apt to affect the extremities of bones, and is often due to low forms of inflammation. At any rate it prefers the extremities and the cancellated structure of bones. If I should cut down through the sore into the cancellous tissue and find a spongy, yellow cavity, filled with broken fat cells and blood, and so soft that it could be broken up with a probe, I could go on indefinitely digging away the softened bone. Such a condition of disease is caries or ulceration of bone, but such treatment is of no use, because we do not dispose of all the disease. It is like scraping off the surface of an ulcer and expecting it to heal at once from the bottom. Nature has not set a limit to the diseased process, but if there be reason to believe that pus is burrowing, we should give it a free outlet. In necrosis it is necessary to remove the sequestrum, if by gouging down we can find it. We thus get rid of a foreign body and stop the inflammation.

The symptoms here make me suspicious of caries, and especially the location of the open sore. But other symptoms are significant of necrosis, so that I am equally balanced between the two affections. Our best procedure will be to cut down and enlarge the opening into the bone. I should also call your attention to the weakness of the knee-joint, which bends outward, showing a lack of strength in the internal lateral ligament. In the other knee we find no such weakness.

This is an instructive case, not because it is rare, but because it is an ordinary, every-day case, and we meet so many like it. Our diagnosis is to be decided by operative interference, which will discover the true nature of the affection. To prevent undue hæmorrhage I will first apply the Esmarch bandage from the toes up to the thigh. Introducing my probe I find it fairly in a cavity. This is an indication of caries, and, as you notice, the diseased point is near the head of the bone. But the disease has been lower down, as shown by the scars. It will now be proper to make a crucial incision, and see if we can find anything within. You will observe my probe going down into the cavity. With my dressing forceps I tear away the *débris*, and within the cavity find dirty pus and a rough, hard bottom. This is unlike caries, and is probably necrosis. My probe goes quite a distance downward, but not upward. I think it proper to enlarge the opening into the bone. It is shaped like a bullet hole. By means of mallet and chisel I cut out a piece of bone, which I finally loosen and bring away with the bone forceps. This reveals the sequestrum, which, being quite large, will require further enlargement of the opening. I thus succeed in removing one large mass, which, practically, is a slough of bone. Beyond the site of the sequestrum the cavity seems closed. Nothing else remains than exfoliated fragments, and the bottom of the cavity is hard

and bounded by firm bone. I cannot say too much in favor of the Esmarch bandage, which has given us the opportunity to explore the bone without any hæmorrhage. As I remove the bandage you see the blush of the returning circulation as it comes down the leg, showing how perfect it is. Now we see an oozing of blood in the wound. How shall we arrest this hæmorrhage? By packing the bone cavity with small sponges. But I first put into the cavity a square of oiled cloth. When I take out the sponges, one by one, I shall have no difficulty, and shall cause no pain, because of the oiled rag. I now insert the cloth, pack in the sponges, and bandage over all. In twenty-four hours I shall remove the sponges and dress with antiseptic appliances, and keep the patient in bed. This will be the whole treatment. In six weeks the cure will probably be established.

Compound Fracture. — I finally have to show you a man who has just been brought into the hospital for treatment. While at work the point of a pickaxe in some way was driven entirely through his left hand, near the ulnar border. The result is a lacerated wound and a compound, comminuted fracture. The fifth metacarpal bone has been cut through. But I do not feel justified in treating or examining this case without ether.

In administering ether to patients who are fully dressed, we should be careful to see that there is no interference with the action of the diaphragm. Loosen the waistband and whatever there may be about the neck. This man has a leather strap about his waist, and this we remove. In females the corsets should be unfastened and the strings which hold the skirts untied. Otherwise the diaphragm will not have the free play which is vitally necessary, because after etherization we depend upon this muscle. When the patient has become insensible he sinks down in the chair, and still further impedes a diaphragm which may be already constricted by garments. If we have to turn an etherize patient upon his side, to examine the rectum, for instance, we must take care that the arm, which in this position is drawn back, does not become dislocated. Drawing back the arm causes the patient to fall forward, and makes it easier to examine or introduce a speculum into the rectum or vagina. One cannot be too careful, however, to keep the shoulders elevated; otherwise the movements of the thorax are interfered with, or the patient's face might fall into the pillow and he become suffocated.

I now examine our patient freely, and find that the injury is very ragged. The fourth metacarpal bone is all right, but the fifth has been so cut that a large piece is gone or has been driven down into the wound. The fracture is rough and comminuted. The upper fragment points upward and the lower downward and backward. The periosteum is mostly gone, and the missing bone cannot be renewed because of this loss of periosteum.

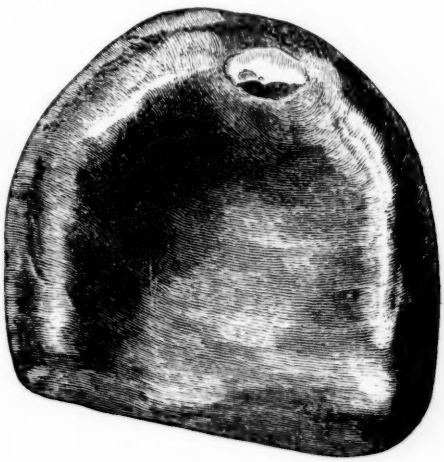
The best treatment will be to saw off the rough ends of the bone, remove all fragments, and afterward syringe out the opening daily with antiseptics; and, to promote suppuration, apply a flaxseed poultice mixed with charcoal to keep it sweet. Thus we treat the hurt as an open wound. In all lacerated and punctured wounds it is worse than useless to close them by stitches.

A CASE OF THIRD DENTITION.

BY EDWARD J. FORSTER, M. D.,

Surgeon to the Charlestown Free Dispensary and Hospital.

THE history of the case from which the cast represented in the annexed wood-cut was taken is as follows: —



Henry L., an Englishman, seventy-seven years old last December (1876), twenty years ago had the teeth then remaining in his upper jaw removed on account of "neuralgia." About ten years ago two teeth appeared where the upper right central and lateral incisors had been. The new-comers were smooth, thin, and transparent; they became loose and were removed with the fingers, — the last one two years after its appearance. The position they occupied is shown on the cast by the roughened line to the left of the tooth now present.

C. A. Harris, in his Dental Surgery, quotes from Good's Study of Medicine, as follows: —

"For the most part, the teeth in this case (third dentition) shoot forth irregularly, few in number, and without proper fangs, and even where fangs are produced without a renewal of sockets. Hence, they are often loose, and frequently more injurious than useful by interfering with the uniform line of indurated and callous gums, which, for many years perhaps, had been employed as a substitute for the teeth."[1]

The tooth shown in the wood-cut made its appearance four years ago, and is serviceable, although the owner thinks it is "beginning to rot" and is afraid he will soon lose it.

In regard to the possibility of a third dentition, Harris says: —

[1] The Principles and Practice of Dental Surgery. By C. A. Harris, M. D., D. D. S., etc. Eighth edition, p. 176.

"That nature makes an effort to produce a third set of teeth is a fact which, however much it may be disputed, is now so well established that no room is left for cavil or doubt."

Wedl,[1] in his Pathology of the Teeth, gives the names of eleven writers of recent times who have either seen or reported cases, but expresses no opinion as to his own belief, saying, "The possibility of the occurrence of a third dentition is doubted, and even openly denied by many." The cast which was kindly made for me by Edward Page, D. M. D., has been deposited in the Warren Museum of Harvard University.

THE VOLUMETRIC METHOD OF WRITING PRESCRIPTIONS.

BY W. H. LATHROP, A. M., M. D., TEWKSBURY, MASS.

In a recent article upon the metric system, Dr. T. B. Curtis very justly observes that the question of measuring as opposed to the weighing of liquids is one entirely distinct from the decimal system of weights and measures. I am strongly of the opinion, however, that the physician in prescribing liquids, whatever be the system employed, should use the volumetric rather than the gravimetric method. It seems to me that this whole question turns upon the method in which a preparation is to be administered. It being admitted that the medicine will be given out at the bedside by measure, should not the prescription be so written as to show how much it will measure? It is a question whether it is the business of a physician so to acquaint himself with specific gravities that he can express these measures in weight. What does a physician gain by such a mode of expression? Suppose, for instance, that it is desired that a patient shall have a solution of chloral in syrup, of the strength of one gramme of chloral to ten cubic centimetres of the solution. The physician directs, we will say, that the patient take five cc. at each dose, knowing that in this way exactly half a gramme of the active medicine will be received. Such a prescription, I am confident, would be in no way improved by translating the cubic centimetres to their equivalent in grammes.

When the liquids of a prescription are expressed in volume the physician can look over it and tell at once how many doses of each active ingredient it contains, and if the decimal system is used this is especially easy. Suppose that laudanum is to be prescribed in the dose of one cubic centimetre (sixteen minims), while five cc. is to be the dose of the prescription. If the liquids are expressed volumetrically the physician has only to observe that his tincture comprises *one fifth* of his whole prescription to make sure that the opiate appears in proper quantity. Here is exactness with celerity. Gravimetric expression, on the

[1] Translation from German, by W. E. Boardman, M. D., Philadelphia, 1872, p. 87.

other hand, would only be consistent with gravimetric administration. In many cases, of course, the bulk of a solution is materially changed by the addition of solid substances, but all danger of error is avoided by directing that the excipient be added till the whole solution reaches a certain bulk. It is a very good rule, I think, to prescribe the excipient in this way habitually.

Our pharmaceutical friends should not forget that in the separation of their profession from our own, the physician has ceased in a great measure to use the scales, and it is therefore more difficult, no doubt, for the modern physician to apprehend the relations of liquids by weight.

If it is desirable for pharmaceutical reasons that the Pharmacopœia should abandon the use of measures for liquids, the medical profession will no doubt consent willingly to the change. They will be glad to contribute to pharmaceutical accuracy and efficiency. On the other hand, however, the physician should insist on writing his prescriptions with distinct reference to their clinical destination, which involves volumetric administration.

With regard to the metric system, it is to be hoped that physicians will not delay using it until they know the specific gravities of liquids. There is no more reason why the weights of liquids should be used in connection with the metric system than in the other, nor in fact as much reason, for in the metric system the expressions of weight and volume have definite relations to each other which can easily be borne in mind.

We have used the metric system in the State Almshouse for over a year with increasing satisfaction, and have been surprised at the quickness with which it can be learned. If a person remembers that a gramme is about fifteen grains, and writes his prescription so that the different parts shall be in proper *proportion*, the new system will be as familiar as the old in a very short time.

Some of our mathematical critics — and recently Dr. E. T. Williams — remind us of the superiority of the duodecimal system of numeration. This would imply new characters for the numbers "ten" and "eleven," while the figure "10" would indicate twelve units, "100" would indicate one hundred and forty-four units, and so on. When this change in numbers is brought about there is no doubt that those who are at present the friends of the decimal system of weights and measures will as strongly favor the duodecimal, — if they are alive. It is because the system of numeration actually in use is decimal that a corresponding system of weights and measures is advocated.

RECENT PROGRESS IN GYNÆCOLOGY.

BY W. H. BAKER, M. D.

Removal of Fibrous Tumors from the Uterus by Traction. — For the past three years Dr. T. Addis Emmet has reported cases of the above class to the medical societies of New York,[1] and has published other cases, with remarks upon the operations, in some of the leading medical journals.[2] Although it had been his custom for years to remove fibroids from the uterus after this manner, yet the rationale of this course of procedure seems only to have been clearly determined in his mind a little more than three years ago.

The patient having been prepared for the operation by incisions of the cervix, the administration of ergot, or other means, which should allow or force the tumor to present at the os externum, if possible, — the hæmorrhage being controlled during the time by styptic injections or the tampon, — he proceeds to draw down the lowest portion of the tumor with the double tenaculum or vulsellum forceps. Then, if possible, other forceps are applied higher up, more traction is made, and the portion cut off with a pair of blunt-pointed scissors curved on the flat side. Traction is again made on the remaining part of the tumor, and another portion cut away, which is repeated until the whole mass is removed.

The advantages claimed for this method of operating are : *First*, less danger from hæmorrhage ; for, as traction is made, uterine contraction is excited, which is kept up by the constant traction, so that the tumor may be removed, piece by piece, with almost no flow of blood. *Second*, less danger subsequently from septicæmia ; for, as the uterus keeps up a firm contraction, it assists materially in the enucleation of the tumor, forcing it to become more and more polypoidal in character, until at last there is left to divide but the small pedicle of the tumor, consisting of its capsule. There being but this very small denuded surface, the danger from septicæmia is reduced to a minimum.

Dr. Emmet has thus repeatedly been able successfully to remove tumors varying in size from three to eight and a half pounds ; and the great advantages of this method of operating have been twice experienced by myself. The only objection which it seems possible to raise against this operation is the increased danger of producing inversion of the uterus ; and we think, when compared with the greater advantages which it possesses, even this must be small. Granted that such an accident may occur, the readiness with which it may be reduced, if treated immediately, will help us to yield this point and give the above method a just trial.

[1] Obstetrical Society of New York, March 3, 1874. New York State Medical Society, 1876.

[2] New York Medical Journal, July, 1875. American Journal of Obstetrics, January, 1877.

Methods of rendering the Female Urinary Bladder accessible, and probing the Ureter in Women. — That the interior of the bladder has for a long time been accessible for exploration we are very well aware: not only by the opening of the vesico-vaginal septum, which has been so strongly enjoined by Dr. Emmet, particularly in treatment of cases of chronic cystitis, but also by the rapid dilatation of the urethra, which we had repeatedly seen practiced by Dr. J. Marion Sims, and which was years ago advocated by some of the best surgeons of Europe. But for the perfectness of this latter operation and for the additional means of diagnosis and treatment offered by the readiness with which it has been shown that the ureters may be probed through the dilated urethra, the profession is indebted to the late Professor Simon of Heidelberg. In the October number of the *New York Medical Journal* for 1875 we find a translation, by Dr. Bernays, of a clinical lecture by Professor Simon, in which are described very carefully the directions for accomplishing rapid and bloodless dilatation of the female urethra and for probing the ureters. The steps for the accomplishment of the dilatation of the urethra, as therein detailed, consist of three acts: ***First,*** *the slitting of the margin of the urethral orifice* (this being the narrowest and most unyielding part of the urethra), which is done by two lateral incisions in the upper margin of one fourth centimetre in depth, and one downward of one half centimetre in depth. By these incisions, considerable lacerations of this outer part of the urethra are avoided, and the finger is allowed to enter deeper into the bladder.

Dilatation of the urethra with plugs forms the second act. These dilators consist of seven plug-shaped specula of graduated sizes, each larger size being one millimetre greater in diameter than the one preceding it. They are made of hard rubber, and are really specula, cut off straight at the point, and shutting with convex plugs, thus forming round, smooth dilators. After the use of the largest, which is two centimetres, in diameter, the finger may readily enter the bladder. The amount of dilatation in the adult which it was found could be produced without danger of incontinence following was with plugs measuring 1.9 to 2 centimetres in diameter, or 6 to 6.3 centimetres in circumference; and, in case the disease justified a more daring course, the dilatation might be increased to 6.5 or even 7 centimetres, with the danger of producing some slight incontinence for a few weeks, which would then pass away. In girls, the dilatation should not be carried to the same extent by any means. But it was found that 4.7 to 6.3 centimetres in circumference were measures inside which it was necessary for the surgeon to keep, according to the individual case. These plugs have a great advantage over the finger, the forceps, or the many-branched dilators which have been much advised and used, since they give the force applied more equably, and there is less danger of tearing or bruising

the mucous membrane at the narrowest points, as under the pubic arch. In cases of dilatation of the urethra, within the above limits, no incontinence should follow. In exceptional cases, however, with uncommonly thick fingers and the palpation of the bladder repeated often and for a length of time, some incontinence might be expected to follow for twenty-four hours.

The third act consists in passing the finger through the urethra into the bladder and examining its interior. This is very much aided by using the forefinger for the examination, at the same time passing the middle finger into the vagina and, with the other hand above the pubes, pressing the fundus of the bladder down upon the exploring finger. The patient being anæsthetized, all the above-mentioned three acts may be accomplished in a very few moments. The indications for this means of dilating the urethra are: (1.) For the diagnosis of the diseases of the mucous membrane. (2.) For the diagnosis of foreign bodies and stones, which can be found when they are very small. (3.) For the extraction of such bodies. (4.) For the purpose of applying strong caustics in cases of inveterate catarrh of the bladder. (5.) For the cure of fissures of the urethra. (6.) For the diagnosis of defects in the vesico-vaginal septum when the vagina is closed. (7.) For the diagnosis of the seat and extent of growth of tumors in the vesico-vaginal septum. (8.) For the extirpation of tumors, especially of papillomas, starting from the mucous surface of the bladder. (9.) For the discovery and subsequent extraction or excision of renal calculi from the vesical part of the ureter. (10.) For the opening of hæmatometra, when puncture is impossible or too dangerous, between the bladder and the rectum; as, for instance, when there is a congenital deficiency of a part or the whole of the vagina. (11.) For the cure of colo-vesical or entero-vesical fistula, by cauterizing the ostium vesicoli of the fistula.

The probing or catheterization of the ureter may be accomplished as follows: The urethra having been dilated, the finger is passed through it, and about one inch beyond the neck of the bladder it finds the ligamentum interuretericum, which is more prominent on either side than in the centre. About one half to three quarters of an inch from the median line, on the surface of this ligament, are the orifices of the ureters, which are imperceptible to the touch; and it is, therefore, necessary that this point of the ligament should be fixed with the finger, and the probe or catheter passed upon it upward and outward in the direction of the ligament. By slightly pushing, we try to introduce the probe into the orifice of the ureter. If it does not enter, it will be arrested by the walls of the bladder; but if it does it can easily be pushed on in an upward and outward direction, and we feel the probe covered, for a few centimetres, by mucous membrane.

PROCEEDINGS OF THE CONNECTICUT RIVER VALLEY MEDICAL ASSOCIATION.

A. P. RICHARDSON, M. D., WALPOLE, N. H., CORRESPONDING SECRETARY.

OCTOBER 31, 1877. Twenty-five members were present. The vice-president, Dr. N. G. Brooks, Charlestown, N. H., in the chair. In conformity with the by-laws, requiring that an address shall be delivered by the vice-president at one of the regular meetings, Dr. Brooks read an interesting paper on Arsenic, showing the various forms in which the two arsenical pigments, Scheele's and Schweinfurth's green, are used, whereby there is unrecognized danger to the people. He pointed out wall-paper as the most prominent and by far the most common source of arsenical poisoning, and gave a few of the more simple methods of detecting the arsenic, with a reference to the general theories advanced as to its method of introduction into the system, closing with an account of some interesting cases under his own observation.

Excision of Knee-Joint. — Dr. Richardson, of Walpole, N. H., presented a girl fourteen years old, who was shot in the knee-joint one year ago, the gun being loaded with seventy-five shot, and accidentally discharged in the small room in which she was at work. Excision of the articular ends of the bones forming the joint was performed by Dr. Twitchell, of Keene, N. H., and the leg placed upon a straight splint for ten weeks, after which a starched bandage was applied. The union is perfect, and, with two inches shortening, there is a very useful leg.

Dr. Richardson read a paper on Sleep.

Plants in Rooms. — Dr. George Spafford, Windham, Vt., read a paper on House Plants, saying that as physicians are often asked as to their sanitary effects, it is important that we answer understandingly. The objections usually advanced are shutting out of sun and light from the windows, dampness in the air arising from earth in pots, but chiefly contamination of the air from exhalation of carbonic acid by vigorously growing foliage. But a room containing plants is more likely to have the windows open to the light than otherwise. The moisture of the water of the kettles, or reservoir, or stove is greater than from many pots of earth.

Professor Kedzie, of Michigan Agricultural College, has answered the third objection by an analysis of air from the college green-house, showing that, while the out-door air contains four parts of carbonic acid in ten thousand of air, the air taken from the green-house, holding more than six thousand plants, in the morning, before sunrise, when the room had been closed tight for twelve hours, contained an average of only 3.94 parts of carbonic acid in ten thousand of air. This deficiency of carbonic acid he attributes to its absorption by the plants by day, and consequent accumulation of oxygen, as an analysis, made by him during the daytime, at two o'clock P. M., indicated only an average of 1.39 parts of carbonic acid in ten thousand of air.

Peter Henderson, of New York, states that no more healthy class of men exists than green-house operators, though often compelled to remain by night in winter, and sometimes to sleep in closely shut green-houses. Professor Mantegazza, of Milan, has shown that the cultivation of common plants is

worth something more to us than the pleasure they give to the senses of sight and smell, since they evolve quantities of ozone, developed by the action of the sun's rays, and in some cases this continues to be evolved during the darkness. The narcissus, hyacinth, heliotrope, and mignonette are mentioned among the most valuable of the ozone makers, and we know that as a therapeutic agent ozone has been employed to some extent. Some German physiologists have maintained its efficiency in tuberculosis, asthma, rheumatism, gout, and sundry other diseases. So, besides the use house plants are to the invalid in directing his attention from his own maladies, we may even claim a health-giving influence from the plants themselves, and safely conclude that the number of plants usually kept in any dwelling-house would do no harm if kept in the bedroom.

Cerebro-Spinal Meningitis. — Dr. S. Nichols, Bellows Falls, Vt., presented a paper describing an epidemic which prevailed in his vicinity during the present autumn. All the cases presented some of the characteristic symptoms of spinal meningitis, and recovered after two or three weeks' sickness.

Dr. Allen, White River Junction, Vt., spoke of an epidemic of typhoid fever, which had occurred near his place of residence, but could not account for it. In this connection he made remarks upon the usefulness of large doses of quinia in reducing temperature.

An epidemic of jaundice was mentioned by Dr. Spafford, of Windham, Vt. The general health was reported as good in the district represented.

A Quack Routed. — An interesting feature of the meeting was the interference of the society with the business of a notorious quack, who had lately arrived at Bellows Falls, and was receiving fees of fifty dollars from many a hopeful patient. His advertisements flooded neighboring villages. When waited upon by an attorney, under the direction of the association, and informed that he was violating the statutes of Vermont against irregular practitioners of medicine, he asked the privilege "to rise and explain" before the association, which privilege was granted. There he expressed a desire to appear before a state censor for an examination. Accordingly, a censor present gave him a private examination, which a reporter immediately made public to the prosecuting body, much to their merriment. The committee appointed to prosecute had little to do, as the next train bore the impostor to other and more congenial fields for his nefarious work.

WALPOLE, N. H., *November* 16, 1877.

PROCEEDINGS OF THE STRAFFORD DISTRICT, N. H., MEDICAL SOCIETY.

J. R. HAM, M. D., SECRETARY.

THE Strafford District, N. H., Medical Society held its seventieth annual meeting at the American House, Dover, on Wednesday, December 12, 1877.

Twenty-three members were present, and the president, Dr. B. W. Sargent, was in the chair.

Pistol-Ball Wound. — Dr. W. H. Horr reported a case of pistol-ball wound

of the chest. The ball, which was .32 of an inch in diameter, entered between the fifth and sixth ribs, and three fourths of an inch outside of the right nipple. It was supposed that the ball was lodged in the lung. There was very free expectoration of blood, and on the next day there was a violent inflammation of the right lung and pleura. The pulse on the second day was 136, temperature 105° F., and respiration 44.

After ten days had passed, the back of the patient was carefully explored, and a hard substance, which afterwards proved to be the ball, was discovered just over the right kidney, and in close relations to the spinal column. The patient improved slowly, and not till four weeks had passed was he able to sit up for an hour or two.

At this time, four weeks after injury, Dr. Horr cut down upon the ball and removed it. It was lying under the lumbar fascia, and was considerably flattened. The patient and missile were exhibited to the society.

Dr. D. T. Parker read a paper on the Privileges and Responsibilities of the Physician.

Medical Ethics. — The president gave the annual address, choosing for his theme Medical Ethics.

He said that there was too often a lack of conformity to medical ethics on the part of regular practitioners, and this was, in a great measure, the cause of the charlatanism of the day. He pleaded for a more decided stand by this society against offenders in its ranks and against the irregular practitioners who are without.

Recto-Vaginal Fistula. — Dr. L. G. Hill reported a case of atresia of the anus, with a recto-vaginal fistula which had served as an artificial anus for years without the true nature of the difficulty having been suspected. The discovery was made by Dr. Hill, as he, in consultation, was making an examination for uterine disease.

The patient was a married lady and the mother of several children, and was found to have acquired some malposition of the uterus. The perinæum was very narrow, and the orifice of the anus was completely closed, leaving only a slight depression at its site. On introducing the finger into the vagina a circular opening was found in the posterior wall, through which the forefinger passed with ease into the rectum. The muscle surrounding the fistula seemed to have some slight sphincter power. The patient related that when she was a girl she was one day searching for eggs in her father's barn, and, while attempting to slide down from the haymow, slipped upon part of an ox-bow which was nailed to the side of a post, and which was used to hang a harness on. The free end of the ox-bow entered the vagina and held her fast until relieved by friends. The family physician said that there was no rupture, that she had sustained only a severe contusion, and treated her by placing an oiled tent in the vagina to prevent inflammatory adhesions. The physician in attendance, who had been often called during the last twenty years, mentioned to Dr. Hill the fact that he could never induce his patient to take cathartics, nor did she ever give him a satisfactory reason for her refusal to do so.

Alcohol. — Dr. T. J. W. Pray read a paper on the Therapeutic Uses of Alcohol.

The society adjourned at two o'clock for dinner, which was served at the American House.

After dinner the following officers were chosen for the ensuing year: President, B. W. Sargent, M. D.; secretary, J. R. Ham, M. D.; treasurer, Chas. A. Tufts, M. D.; auditor, M. C. Lathrop, M. D.; councilors, Wm. Waterhouse, M. D., Wm. H. Horr, M. D., Eli Edgecombe, M. D.; orators, Chas. E. Swasey, M. D., Chas. E. Blazo, M. D., Eli Edgecombe, M. D.; reporters, S. C. Whittier, M. D. (on gynæcology), Jas. H. Wheeler, M. D., John W. Parsons, M. D., Wm. H. Sylvester, M. D. (on topics of their own choice).

Dr. T. J. W. Pray was appointed to read a paper before the New Hampshire Medical Society at its annual meeting in June, 1878.

Pistol-Ball Wound. — Dr. Jere. F. Hall reported a case of recovery from wound by pistol ball in the abdomen, where there was extreme tympanites with severe typhoid symptoms. The patient was treated with brandy, opium, poultices, and turpentine enemas.

Stimulants. — Dr. John W. Parsons spoke of the value of stimulants in the treatment of disease, saying that they were *essential* in many cases. He also said that the types of diseases had not changed, as claimed, but that they seemed different only because there had been a change in the treatment.

Dr. Horr thought he met the old, sthenic type of disease now, but it was among those who lived simple lives in the rural districts. He met the modern, asthenic type in the city.

Drs. Lathrop, Wheeler, and Edgecombe took up Dr. Pray's paper on Alcohol, and discussed its use in typhoid fever.

Voted, to hold the semi-annual meeting at the hotel in Rochester, N. H., at such time as the president and secretary shall designate, and that the members residing in Rochester be a committee of arrangements for the meeting.

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA.

The Medical Society of the District of Columbia assembled Thursday night, December 20th, at Marini's Hall, which was well filled. The occasion was to celebrate the sixtieth anniversary of the society. Dr. Toner, as chairman of the committee of arrangements, in announcing the programme for the evening made, in substance, the following remarks: The Medical Society of the District of Columbia was founded September 26, 1817, and this meeting, therefore, represents the sixtieth anniversary, — a period of time which represents two generations of human life. Our first charter was obtained from Congress in March, 1819. The district then embraced the original ten miles square, with the three cities, Washington, Georgetown, and Alexandria, the whole population being but little over thirty thousand. There were twenty-one physicians named in this charter, all of whom are now deceased, and they included nearly all the medical men then practicing in the territory named. I use the term our first charter, because we are now acting under a revised and amended act of incorporation granted July 7, 1838. In our present charter there are named twenty-two physicians, but the nearly forty years that have supervened

since that time have removed from earth all but seven of our honored and worthy representatives. The names of those living are Drs. J. B. Blake, Joseph Borrows, H. F. Condict, J. C. Hall, Benjamin King, Harvey Lindsly, and Noble Young. Of these, two — Drs. J. B. Blake and J. C. Hall — have been physicians for over fifty years; and Drs. Joseph Borrows, Harvey Lindsly, and Noble Young will have been physicians fifty years next March. All these physicians are as familiar to the citizens of Washington as household words, and have been particularly blessed with length of days and professional usefulness, beyond the average allotted to medical men in the United States, — the average life of physicians being but about fifty-eight years. The average years of professional life in America is thirty-two and one half years; and the average age at which physicians commence to practice is between twenty-five and twenty-six years. From the formation of our society in 1817 to the present there have been about four hundred and fifty names enrolled as licentiates of this society. Of these about one hundred and eighty survive, and are more or less actively engaged in practice. Without further prefatory remarks I proceed to the discharge of the agreeable duty assigned to me of presenting to you an old and highly esteemed member, who has consented to be the orator of the evening, — Dr. A. Y. P. Garnett.

Dr. Garnett opened his able and interesting address with a reference to the rapid progress of the science of medicine, due mainly to the organized efforts of the profession, particularly such associations as this. He gave a rapid glance at the history of medical practice and schools of medicine, ending with a highly interesting account of the straits to which the Confederate surgeons and physicians were reduced during the war by the enforcement of the Federal blockade, which partially deprived them of their supplies. The physicians, cut off from their accustomed vegetable drugs, substituted indigenous plants with great success. He complimented them for successfully battling with the emergency, and also complimented the surgeons for devising new methods of practice, made necessary by the blockade, particularly Professor Campbell for a valuable discovery which he described. He closed with a tribute to the present high character of the profession generally, and the improvements in the science of medicine due to them.

MITCHELL ON FAT AND BLOOD.[1]

The object of Dr. Mitchell's interesting little work is to describe a mode of treatment which he has found to be very successful in a class of cases familiar to most practitioners, and often difficult to cure. The patients are chiefly women who have been subjected to some severe physical or mental strain, and frequently to both combined, — although a defective vitality, congenital or acquired, is probably often the underlying cause. "A young woman falls below the health standard, loses color and plumpness, is tired all the time, by and by has a tender spine, and sooner or later enacts the whole varied drama of hysteria. As one or other set of symptoms is prominent, she gets the appropriate

[1] *Fat and Blood, and How to make them.* By S. Weir Mitchell, M. D., etc. Philadelphia: J. B. Lippincott & Co. 1877. 12mo, pp. 101.

label, and sometimes she continues to exhibit only the single phase of nervous exhaustion or of spinal irritation. Far more often she runs the gauntlet of nerve doctors, gynæcologists, plaster jackets, braces, water treatment, and all the fantastic variety of other cures." The term "nervous exhaustion" is sometimes employed to describe this disease, which, however, in many patients seems to depend upon perversion of the digestive function, while in others the symptoms are largely mental or moral.

Whatever be the cause or the pathology of the disease, in view of the fact that a great majority of the patients are emaciated and comparatively bloodless, Dr. Mitchell believes that the secret of the cure lies chiefly in nourishment, and the method which he employs consists mainly of means calculated to increase the bodily weight and to improve the quality of the blood. These are accomplished by removing the patient from the unfavorable influences of home and sympathizing but unenlightened friends; by enforced rest in bed for a longer or shorter time; by massage and electricity to improve the circulation and muscular nutrition; and, lastly, by a carefully regulated diet. For the details of treatment on all these points we must refer the reader to the book itself, assuring him that he will find much valuable information in it.

Dr. Mitchell is sparing of the use of drugs in the treatment of nervous asthenia; many of his patients, indeed, had exhausted the pharmacopœia in vain before consulting him. Nevertheless, laxatives are sometimes required, and in not a few cases some preparation of iron (the subcarbonate is preferred) and small doses of strychnia seem to aid in the cure. The extract of malt is also frequently employed.

A sufficiently large number of cases is detailed, adding much to the interest and value of the book by illustrating practically the method pursued and the results of the treatment. While the favorable effects of the latter are evident, the author does not pretend that all his patients are cured; a very few were not even essentially benefited.

We object to the title of the book, as being somewhat sensational and also misleading. While improvement in nutrition is an important element in the plan to be followed, it is a means and not the end. Indeed, we are inclined to ascribe to it less curative virtue than to the moral effect of separation from home, combined with the faith and obedience which the patient will yield only to a firm and judicious practitioner; the man is as much as the method.

BURNETT ON THE EAR.[1]

This work was prepared, as the preface states, with the object of presenting the most recent advances in otology, and is divided into two parts, — the first treating of the anatomy and physiology, the second of the diseases and their treatment. In the first part the anatomy of the different portions of the ear, auricle, external meatus, membrana tympani, etc., is described concisely and

[1] *The Ear: Its Anatomy, Physiology, and Diseases.* A Practical Treatise for the Use of Medical Students and Practitioners. By Charles H. Burnett, A. M., M. D., Aural Surgeon to the Presbyterian Hospital, Surgeon in charge of the Infirmary for Diseases of the Ear. Philadelphia: Henry C. Lea. 1877. Pp. 615.

clearly with the aid of numerous admirably executed wood-cuts, and the anatomy of each separate portion is followed immediately by a description of its physiology, in which are found the later results of acoustic physiology, many of them from recent German works, but some from the author's own experiments. In thus bringing together the anatomy and physiology, and particularly in the thorough description of the physiology, the work differs from most recent publications on the ear, and the author is quite right in thus directing early attention to these, the only true foundations for success in aural practice. The last chapter of the first part gives in some three pages "a scheme of relationship between the middle and internal ear," which shows in a very clear way the conducting apparatus of the ear and the connection between this and the nervous structures of the labyrinth; it might, in our opinion, have been carried just one step farther by explaining the course which a wave of sound takes, and the way it is changed from the time it enters the external meatus till it is perceived by the brain, — facts which are but too often beyond the knowledge of the student and average practitioner.

The second part begins with a description of instruments and their employment, followed by an account of the different characteristics of sound and hearing and the method of testing the ear. Then come in order the diseases and treatment of the separate anatomical divisions of the ear. Almost all the known diseases of the ear are described in a thorough manner, and the treatment advised is judicious. Space would fail us here to analyze the many good qualities of the book, the many new and interesting investigations which are for the first time here incorporated in a text-book, the familiarity of the author with the literature of his subject, and the judicious selection which he has made from it, both in regard to pathology and treatment.

In one or two respects, however, the author is guilty of omissions which we should hardly have expected in such a thorough work. By what must have been due to an oversight, we find no account of the appearance of the normal membrana tympani on inspection. Certainly a few pages on the characteristics of the membrana tympani, its position, polish, thickness, mobility, light reflex, etc., in fact on what one is to look for in the ear, would not have been out of place in such a book. So in regard to auscultation of the ear, a description of the sounds to be distinguished on inflation should have been given; and the chapter on examination of the ear seems to us to need careful revision, especially in the accounts of the simpler methods of examination. Among the diseases of the auricle, while cornu cutaneum and tubercular syphiloderma are described, nothing is said of what has been called burrowing abscess, which, although rare, on account of the serious deformity it causes should have been mentioned. In regard to foreign bodies in the ear, the author's advice to trust to the syringe rather than to picking and probing is undoubtedly wise, but there are cases in which the use of instruments is necessary, and the wire loop and the small hook might well have been added to the other methods of removal which are spoken of.

In pathology, we cannot but think that Wendt's description of desquamative inflammation in the auditory meatus, tympanum, and mastoid better explains the pathological process which takes place than the old name of cholesteatom-

atous tumors, which is here retained. Again, otitis media hæmorrhagica would better have been described as a rare variety of simple catarrhal inflammation than have been placed by itself among the unusual diseases. In speaking of the results of purulent inflammation of the tympanum, the careful autopsies and dissections which have been reported would have justified the author in using a more systematic arrangement of his fatal cases, and the different passages by which the inflammation may extend from the ear to the brain might be more carefully given. No mention is made of neuralgia of the tympanic plexus, although it is by no means unusual for the examination of the ear to cause the surgeon to order the removal of an offending molar tooth. Finally, in a number of instances there is too great a tendency to cite cases which, although of interest in a journal, are out of place in such a large and comprehensive work as this.

The book as a whole, however, we can most heartily commend as a very fair exponent of our otological knowledge and a safe and reliable guide in practice.

DIPHTHERIA.

Diphtheria is thought to have been familiar to the ancient Greeks, Romans, and Egyptians; it probably prevailed more or less, under various names, during the first fifteen centuries of the Christian era. It is known to have been epidemic in Western Europe in the sixteenth, seventeenth, and eighteenth centuries. The severe and extended epidemic of 1818 in France was not felt so largely in other parts of Europe, and only very slightly in England and Scotland; it was the first carefully observed and recorded. Various epidemics occurred in the next forty years in France, but the disease has not of late been known as an epidemic in England until 1855, when its importation by an English family from one of the severely visited French towns gave it the name of *diphthérite*, afterwards diphtheria or Bologne fever, in recognition of its origin. Diphtheria, at that time, was clinically an unknown disease to most practicing physicians in England. The epidemic was investigated by the medical department of the privy council, and pronounced contagious, although it was thought by them that the disease also moved from place to place, independently of the direct mediation of persons or clothing, and apparently through the air. Diphtheria appeared also in this country a few years later, where it has been more or less prevalent ever since, reaching its height in this State in 1863 and 1864, and again still higher in 1875, 1876, and 1877; It was also epidemic here, to a certain extent, about a hundred years ago, and near the beginning of this century. The present epidemic has reached a considerable degree of severity in parts of France, Italy, Germany, Russia, and Austria; in the United States, San Francisco and New York, Vermont and Tennessee have suffered severely, showing the wide extent of its prevalence. Occasionally it has come suddenly and as suddenly disappeared; elsewhere, there have been several recurrent epidemics, and in towns where the sanitary condition is very bad it has become virtually endemic. In Great Britain diphtheria is, and has been for a few years, very mildly prevalent; the largest

number of deaths from that cause in any one week during the past year reached only twenty-one in the twenty-three towns, aggregating a population of over eight millions.

Opportunities to study the disease have, therefore, not been wanting, and the mass of literature on the subject shows that extensive observations have been made. It is now agreed that diphtheria is a general constitutional disease, whether primarily local or not. We have the high authority of Virchow that it is pathologically distinct from croup; and its clinical history in this State, at least, has been very different, although, in doubtful cases, the two diseases are often confounded. As to the bacteria-theory of its origin, we can only state that it is one of the three diseases in which bacteria have been found, which are apparently intimately associated with the pathological changes, although it is impossible to say what that relation is, whether causative or otherwise.

According to Reynolds's system of medicine, diphtheria is contagious and infectious, although the exact mode in which the contagion operates is unknown; but the contagion clings to particular places, houses, and even chambers. Tanner, Trousseau, and most of the later authorities state that its contagiousness is established; Aitken says that it seems to be infectious. Oertel describes it (in Ziemssen's Cyclopædia) as a miasmatic, contagious disease; he says, "It develops spontaneously, its origin being a miasm, and is induced by contact with objects and persons infected with diphtheria." Its period of incubation is usually placed between two and five days, — the extremes being one and fourteen. The experience of this State has established its contagious and infectious character without a doubt, but that there is another element, miasmatic, perhaps, in its nature, as was shown twenty years ago by the medical officers of the privy council in England. Diphtheria is not, however, contagious in the same sense that scarlet fever and measles, for instance, are so, for it does not prevail most in densely populated places, where the facilities for contagion are best. As the distance to which scarlet fever is transmissible is less than in the case of measles, so does it appear that nearer contact is necessary in propagating diphtheria than the other contagious diseases. Of course, as in all infectious maladies, only a portion of those exposed become ill.

The mortality from diphtheria is high. Oertel puts it, in severe epidemics, at thirty to forty per cent., English authorities from ten to thirty-three per cent.; Trousseau and Flint say it is enormous. In this State the death-rate from it has ranged from six to eighty per cent. of the cases attacked, and in some localized epidemics every person attacked has died. The fatality has been greatest in the small towns here, in England, and in France. In one small village near our State line, four per cent. of the population died of diphtheria in a few weeks; in France, one small district lost ten per cent. of its population in as short a time; and Trousseau reports an epidemic where, of sixty persons attacked, nearly every one died. On dry, sandy soil, with pure water, good drainage, proper ventilation, and sunny exposure, the mortality has not been excessive except in very young persons, and where the trachea has been invaded. In low and damp or high and damp places, especially in

narrow river-valleys running easterly and westerly, with shallow or clay soils, especially if overlying rock, and with polluted air and wells, the fatality has often been such as to remind us of the plagues of the last century. Overcrowding and want are very unfavorable elements in the prognosis. In the croupous and malignant forms the physician is fortunate when, by the earliest and most supporting treatment, he saves from death by asphyxia or blood poisoning a small per cent. of his patients. There are, unquestionably, mild types of the disease, analogous to the walking cases of typhoid fever; but it is safe to question the accuracy of diagnosis wherever an excessively low death-rate has been reported for a large number of cases.

The treatment by the physician should be supporting to the last degree; by the sanitarian the most rigid isolation. In Widerhofer's wards in Vienna diphtheria is treated with more care in these respects than small-pox. The most excellent results have followed such a course in this State, — where schools, indeed, have been closed, — especially when carried out by an intelligent board of health. The reported number of deaths from this scourge was two thousand six hundred and ten in our State for 1876, a mortality next to that from pulmonary consumption; and, although our registration is so inaccurate that these numbers cannot be entirely depended upon, especially in those cities and towns where it is the rule never to have physicians' certificates of the causes of death, yet this fearful mortality is sufficient to cause some alarm. It is probable, too, that diphtheria has been no less fatal in Massachusetts during the past year. The State Board of Health, a few months since, issued a circular of which more than two thousand copies have been distributed over the State, calling attention to the magnitude of the evil, advising rigid isolation in treatment, thorough disinfection, proper supervision of schools by competent persons, avoidance of exposure of children to the cold, attention to local sources of filth, and, above all, *to the appointment of efficient boards of health.* A few of their recommendations are given here: —

"In all cases of diphtheria, fully as great care should be taken in disinfecting the sick-room, after use, as in scarlet fever.

"After a death from diphtheria the clothing disused should be burned or exposed to nearly or quite a heat of boiling water; the body should be placed as early as practicable in the coffin, with disinfectants, and the coffin should be tightly closed.

"Children, at least, and better, adults also in most cases, should not attend a funeral from a house in which a death from diphtheria has occurred.

"It should be distinctly understood that no amount of artificial 'disinfection" can ever take the place of pure air, good water, and proper drainage, which cannot be gained without prompt and efficient *removal of all filth*, whether from slaughter-houses, etc., public buildings, crowded tenements, or private residences."

The Boston Board of Health, to whose intelligent zeal the recent good health of our city is largely due, have just issued a circular requiring physicians, under Sections 47 and 48, Chapter 26, of the General Statutes, to report to them all cases of small-pox, scarlet fever, typhus fever, and diphtheria coming under their notice within the city. This step is evidently demanded in

the interest of the community, and prosecutions for violation of the ordinance, it is hoped, will not often be necessary. The school committee have already taken the proper steps for controlling the disease, so far as the pupils are concerned.

MEDICAL NOTES.

— We are happy to inform our readers that, owing to the admirable arrangements at the Riverside Press, the fire which occurred there on Monday night was promptly suppressed without loss or delay to any of the periodicals published by Messrs. H. O. Houghton & Co., though the injury to the property of the firm was considerable.

— In the last Report of the State Board of Health of California, an interesting epidemic of diphtheria is reported as having occurred during the month of April, 1876, in the Asylum for Orphans at Vallejo. During the period referred to, there were forty-three cases and ten deaths. The board state that "one of the business men of Vallejo was called to Santa Rosa, Sonoma County, to attend the funeral of some members of a family of relatives who had died from the scourge, diphtheria. On returning to Vallejo, he and some of his family were taken down with the disease, and were attended by members of a family residing near the Home for Orphans. The children of the last-mentioned family were attending the school of the Orphans' Home at the time they were taken sick. Two of the family died, and soon after some of the Home inmates were taken sick with the same disease." During the prevalence of the epidemic no sufficient precaution was taken to isolate the sick, nor was attention apparently given to the fact of the contagiousness of the disease. The board also give some interesting facts with regard to the transmission of diphtheria from point to point. A child just recovering from diphtheria went to visit a family at Dixon, wearing the same clothes as used during its illness. One of the children of this household was soon taken sick with the disease and died, there having been previously no diphtheria in the vicinity and no communication by the child with infected localities. Free intercourse with the sick was allowed, and the funeral of the deceased child was largely attended by other children, thereby causing an outbreak in the school near by, from which a large number of cases started. Not one person became ill who had not been exposed to direct contagion. The partial dependence of the disease upon general insanitary conditions is noted. In San Francisco, it was most prevalent in those parts of the city where the sewerage is bad, where the soil is damp, where overcrowding, filth, and bad ventilation coexist with the other conditions usually prevailing in places occupied by the class of people who are least willing or unable to live in a manner favorable to health.

— The State Board of Health held the fourth hearing in the case of petitioners of the Bradley Fertilizer Company at Weymouth, on the 3d inst., when the case was closed. It appeared that about twenty thousand tons of manure are made each year, chiefly from rock phosphate, fish from which the oil has been tried, and sulphuric acid. The most offensive processes were shown to be (1) unloading the partly putrid fish from the schooners, (2) dry-

ing them by heat, (3) mixing the various ingredients, which last produced a pungent, peculiarly disagreeable smell that was observed by one of the witnesses for the defense at a distance of over fifteen miles. The village of Hull, three miles and a half distant, suffered the most, as the nearer and larger towns of Hingham and Weymouth had been protected by having the windows of the establishment closed and the very offensive processes stopped when the wind was blowing towards them. Improved methods of conducting the business had been introduced from time to time, and it was shown that the nuisance has been enormously reduced in character and frequency, especially in the last eight years. Several hundred people are dependent upon these works for their daily bread; the trouble from the smell is not excessive during the winter, and the defendants agreed to introduce as rapidly as possible still better methods and machinery for avoiding offense. The decision of the board has not been made public.

— Thomas Annandale has been appointed to the chair of clinical surgery in the University of Edinburgh, *vice* Lister.

— The French have passed the following law: "Every person who may be condemned by the police twice for the crime of open drunkenness will be held incapable of voting, of elective eligibility, and of being named for the jury or any public office."

— It is said that a medical school will soon be opened in connection with the University of North Carolina, at Chapel Hill.

— In a letter to the *American Practitioner* we read as follows: In Ireland as in England, opinion is divided as to the merits of Lister's antiseptic surgery. Some of the surgeons use it, others do not. So far as I can ascertain, the majority do not. But the faculty is quite united in the opinion that ether is the safest of anæsthetics, though chloroform and bichloride of methylene are frequently employed. Spencer Wells often uses the latter, and, it is said, gives as a reason "that it is less poisonous to the heart than chloroform, and not so stimulating and tedious as ether."

— Dr. Bigelow reports in the *Practitioner* a case of tetanus, caused by a rusty nail in the foot, which was relieved in less than thirty minutes by introducing a drachm of chloral hydrate into the wound after it had been enlarged by incision.

— John Chiene — page 509, *Edinburgh Medical Journal* for December — proposes (1) a means of lessening the expense of the antiseptic dressing of wounds, and (2) shows how the surgeon may dress wounds without the constant aid of the spray producer.

— The *Cincinnati Clinic* reports an obstinate case of asthma which was entirely relieved by a two-grain pill of grindelia robusta three times daily. The medicine was thought to be the cause of a violent diarrhœa which came on at the end of three weeks.

— At the clinic in Leipzig Professor Wagner has taken the place of Wunderlich, the eminent pathologist and clinician, who died in September last. He was called to Leipzig in 1850, to fill the vacancy created when Oppolzer went to Vienna. To his studies on the fever process and bodily heat was due the universal introduction of the body thermometer. Nearly eight hundred

medical students attend the Leipzig courses, — the largest number at any one school in Germany.

— Freyer (*Medical Record*, September, 1877) has modified the Sims speculum with especial reference to examinations of the rectum, by constructing it of wire one eighth inch thick. The usefulness of this skeleton speculum is at once apparent.

— In *La France médicale* for December 15, 1877, will be found Roger's eulogy upon his colleague and friend of many years, Professor Barth, especially well known as a writer on auscultation and percussion, recently deceased at the age of seventy-two.

— Two new scientific institutes have been opened in Germany. One, in Strasburg, offers facilities for the study of pathological anatomy, clinical and non-clinical autopsies, microscopical vivisection, chemical operations, dissection and surgical operations. The second is the Physiological Institute, in Berlin, which, under Du Bois-Reymond, is provided with all the best appliances and means for physiological inquiry.

— The best local anæsthetic for dental operations is said to be the extract of eucalyptus. Apply one drop on cotton to the sensitive dentine just before excavating.

— The ordinary consumption of opium in this country is about 300,000 lbs. per annum.

HARTFORD HOSPITAL.

Sulphate of Cinchonidia. — The therapeutic value of the sulphate of cinchonidia has been pretty thoroughly tested in the wards of the hospital for the last seven or eight months, during which it has been almost invariably substituted for quinine wherever the latter would have been indicated. The results have been very satisfactory, and its use is still continued. It is employed as a general tonic, an antiperiodic, and is on trial as an antipyretic in typhoid. As a general tonic it has apparently been as effectual as quinine, its power in controlling malarial affections has been unquestionable, and it has seemed to possess very decided antipyretic properties, but has been used in too few cases, perhaps, to prove its power. The plan of administration has been to give one full dose once in twenty-four hours when some decided effect was desired, as breaking up the chills in intermittent or reducing the temperature in typhoid; otherwise it has been given in doses of from two to five grains three times a day.

Twenty-six well-marked cases of intermittent and three of remittent fever have been treated with cinchonidia. Of these, twenty-five were males, four females, thirteen of the quotidian and thirteen of the tertian type, one of the former complicated by enlarged spleen. A brisk cathartic was taken the night succeeding a chill, and fifteen grains of cinchonidia the next morning four to five hours before the chill was expected, and repeated for three days, then the small dose for several days; in the tertian the full dose was given, so as to anticipate the chill four to five hours, and the small dose on the other days, from three to four full doses being given. In seventeen cases no chill occurred

after the first dose, eight had one chill, and one case (tertian), where the cathartic was omitted, lasted a week. Average time of remaining in the hospital, eight days.

Cinchonidia has been quite largely used here in private practice, with generally good results. Those who have tried it to any extent in malarial diseases almost invariably rank it as equal to quinine in these affections; several report but two chills at most after commencing the cinchonidia, which was used as before described, one large dose a day. The reports are not as favorable where from two to five grains were given three times a day, though not less so than when quinine was used. Many use it almost to the exclusion of quinine, commending it highly in typhoid fever, neuralgia, and as a general tonic, causing less headache and cerebral congestion, easily borne when quinine cannot be tolerated, and especially favorable in its action upon children. As in all cases where remedies are concerned, opinions are not uniform, but I have not learned of any one discarding it after a fair trial.

The antipyretic action of cinchonidia has been tested in five cases of typhoid fever, and the observations for a characteristic period in three cases are given; but few cases have been admitted this fall and winter, so that the trial has necessarily not been extensive. The results have been very satisfactory. The cinchonidia was given at ten A. M., a supporting and stimulating diet being the only other treatment, except for special complications. The cases had all well-marked typhoid characteristics.

CASE I. Female, twenty, temperate.

	Seven A. M.		Twelve M.		Seven P. M.	
Cinchonidia.	Temperature.	Pulse.	Temperature.	Pulse.	Temperature.	Pulse.
	101°	99	103°	104	104°	110
Grains 15	103°	110	102°	108	102°	106
	101.8°	110	102°	112	104°	115
Grains 20	102°	110	103°	112	101.8°	110
	100.8°	108	101°	106	104°	112
Grains 20	101°	104	102°	104	103°	108
Grains 15	101.6°	102	101.4°	102	103°	106
Grains 15	101°	100	102°	100	101°	100

The observations commenced about the tenth day, and defervescence was fairly established the nineteenth.

CASE II. Male, thirty-two, temperate. Commencing the tenth day.

	Seven A. M.		Twelve M.		Seven P. M.	
Cinchonidia.	Temperature.	Pulse.	Temperature.	Pulse.	Temperature.	Pulse.
	101.5°	100	103°	110	102°	108
Grains 20	103°	110	103.25°	112	102.25°	108
Grains 20	101°	108	103°	116	102°	102
Grains 20	101.5°	100	101°	110	102°	116
Grains 20	101.25°	110	103.5°	110	103.75°	100
Grains 20	102°	100	104°	106	102°	100
Grains 20	102°	104	102.75°	104	103°	100
Grains 20	102°	100	102°	106	103°	100
Grains 25	101.25°	100	102°	104	101°	102
Grains 20	102°	106	103°	112	102.25°	106
Grains 20	100.25°	106	101°	106	102°	104
	99°	100	100°	102	101°	104

From this point defervescence commenced. The modifying effects of the cinchonidia are marked in reducing the evening temperature, while too short a time is afforded between its administration and the observation at noon to check the tendency manifested pretty uniformly, while the morning temperature does not exceed 102° after commencing the cinchonidia; after the twenty-five-grain dose the evening temperature scarcely exceeds 102°, and a marked reduction is manifested the same evening.

Case III. Female, forty-five, intemperate; admitted about the tenth day, with vomiting and profuse diarrhœa.

	Seven A. M.		Twelve M.		Seven P. M.	
Cinchonidia.	Temperature.	Pulse.	Temperature.	Pulse.	Temperature.	Pulse.
	99.2°	98	102°	102	103°	100
	101°	99	102°	94	104°	96
Grains 20	103°	80	102°	98	101°	86
	101°	75	101°	80	104°	88
	102.6°	90	101°	80	104°	92
Grains 20	101°	84	101°	74	102.8°	82
Grains 20	102°	89	102.8°	88	102.8°	82
Grains 20	103°	89	102°	80	103°	86
Grains 15	101°	89	101°	80	103°	86
Grains 25	102.8°	80	102°	86	102°	98
Grains 20	102°	80	104°	99	102°	80
Grains 15	101°	84	104°	100	102°	92
Grains 20	102°	88	102°	90	102°	80
Grains 20	103°	102	104°	92	102.8°	94
Grains 25	103°	98	104°	103	102°	100
	104°	109	104°	104	104.8°	110
	104°	110	104°	110	104.8°	115
Grains 20	103°	112	104.6°	112	103°	100
Grains 20	102°	100	103°	115	103°	100

After taking the first twenty-five-grain dose vomiting ensued, followed by a chill at midnight. The temperature is doubtless somewhat modified by the condition induced by intemperate habits, but shows a strong tendency to rise. After the second twenty-five-grain dose the cinchonidia was omitted one day; the temperature rose rapidly, the pulse became quick, and the respiration was 40, with marked delirium. The twenty grains were not taken the next morning until about noon, so that the effect is not so apparent until the commencement of the next day. These temperature ranges show a very marked influence exerted by the cinchonidia, the only exception to a purely antipyretic action being the possibility that a malarial element complicating the cases might place them under the head of typho-malarial fever, although the absence of any marked periodicity or chills would militate against any such hypothesis.

Salicylic Acid. — Salicylic acid has not been very much used, and not at all except in acute articular rheumatism, where it has yielded very marked results in a few cases. In one case the patient was brought in on a stretcher, unable to move a muscle, with the joints much swollen, and suffering most acute pain. The temperature was 103½°. He was given twenty grains each of salicylic acid and bicarbonate of soda every two hours. The pain was relieved in a few hours. The next day he was able to turn over in bed, the second to walk, and was discharged, well enough to go home, on the fourth day; the acid was continued two days.

In two other cases the pain was soon relieved, but convalescence was not so soon established. In all instances the acid was given with equal quantities of bicarbonate of soda. Unless relief from pain and acute symptoms is soon effected the acid is not continued, and the same applies generally to its use in private practice here. No very marked ill effects have been observed, except from continued use; in solution it is apt to be irritating to the throat. It is not very extensively used in the city, — mainly in acute rheumatism. A few patients report relief from pain and good results in the subacute form where the alkaline treatment had been used with no effect.

Salicine. — Salicine has been tried in still fewer cases, but with excellent results. In two cases, from five-grain doses every hour, complete relief from the agonizing pain and comparative freedom of motion ensued in twenty-four hours, and the cases progressed rapidly, with alkalies and less frequent doses of the salicine, to complete recovery.

Fracture of Vertebræ. — There are now in the hospital two cases of fracture of the vertebræ, — one recent, the other nine months old.

The subject in the latter case, J. M., thirty-five, laborer, married, temperate, was doubled up between two railroad cars while shackling them. The ninth and tenth dorsal vertebræ were injured, and at the time there was a deep depression between them. When admitted he had a bed-sore over the sacrum, six inches in diameter. There was entire loss of sensation and motion below the seat of injury; urine and fæces passed involuntarily. He was placed upon a water-bed, and the bed-sore soon healed; his appetite and digestion are good, and he appears to be in perfect health and is very cheerful.

The other case of fractured vertebræ happened rather singularly. A man in stepping from one roof to another fell and struck upon his feet, fracturing the twelfth dorsal vertebra and probably the eleventh. He has complete paraplegia below the seat of the injury. There is slight sensation, urine is drawn by a catheter, and fæces are passed involuntarily.

Water-Bed. — The water-bed in use here consists of a zinc tank of the dimensions of the ordinary single hospital bed, a foot deep, on a cast-iron frame. A piece of rubber sheeting is stretched across and held in place by cleats running round the outside of the tank, so loosely that when the tank is empty it reaches to the bottom. A faucet is provided to draw off the water, and a tube for filling. The patient floats upon the surface, can be easily moved, and is more comfortable than in any other arrangement yet tried. The sheeting is easily cleaned, and a new piece can be readily adjusted. The total cost is about forty-five dollars. A tank of wood might be very cheaply made for temporary use.

Plaster-of-Paris Bandages. — The plaster-of-Paris jacket has been applied in several cases of Pott's disease, and the house surgeon, Dr. M. M. Johnson, has hit upon an excellent device in adjustment which has not been mentioned in any of the descriptions I have seen. When the plaster is applied, several folded towels are placed over the chest, with the ends extending above and below the jacket. As the plaster sets, if it becomes too tight, as is very often the case, one or more of these can be very easily drawn out, thus obviating the necessity of putting on a new jacket.

In compound fractures, and in treating fractures generally, the plaster bandages are used, the plaster rubbed into the roller, and just before use the roll thrown into salted water long enough to be wet through. In compound fractures the edges of the fenestræ are packed with small pieces of sponge, which prevent the infiltration of the discharges under the bandage and the edges from becoming saturated and offensive. The sponge is prepared by bleaching an ordinary cheap sponge, and has been used by Dr. Johnson with complete success in controlling the often profuse discharges in compound fractures when a fixed dressing is used. C. W. C.

HARTFORD, *December* 15, 1877.

A PROBABLE ERROR.

MESSRS. EDITORS, — It is quite possible that an apparent error I noticed in my first reading of Darwin's Descent of Man may have been pointed out long ago, but it can do no harm to call attention to it. The passage in which it occurs is the following: —

"In the Quadrumana, and some other orders of mammals especially in the Carnivora, there is a passage near the lower end of the humerus, called the supra-condyloid foramen, through which the great nerve of the fore-limb passes, and often the great artery. [1] Now, in the humerus of man, as Dr. Struthers and others have shown, there is generally a trace of this passage, and it is sometimes fairly well developed, being formed by a depending hook-like process of bone, completed by a band of ligament. When present the great nerve invariably passes through it, and this clearly indicates that it is the homologue and rudiment of the supra-condyloid foramen of the lower animals. Professor Turner estimates, as he informs me, that it occurs in about one per cent. of recent skeletons [nearly two per cent. as given in his Introduction to Human Anatomy, Edinburgh, 1877], but during ancient times it appears to have been much more common. Mr. Busk has collected the following evidence on this head: Professor Broca 'noticed the perforation in four and a half per cent. of the arm-bones collected in the *Cimetière du Sud* at Paris; and in the Grotto of Orrony, the contents of which are referred to the bronze period, as many as eight humeri out of thirty-two were perforated; but this extraordinary proportion, he thinks, might be due to the cavern having been a sort of family vault.' Again, M. Dupont found thirty per cent. of perforated bones in the caves of the Valley of the Lesse, belonging to the reindeer period; while M. Leguay, in a sort of *dolmen* at Argenteuil, observed twenty-five per cent. to be perforated; and M. Pruner-Bey found twenty-six per cent. in the same condition in bones from Vauréal. Nor should it be left unnoticed that M. Pruner-Bey states that this condition is common in Guanche skeletons."

The "Grotto of Orrony," mentioned above, it may be reasonably conjectured, is the same as the "Sepulchral Cave of Orrouy" described by Professor Broca, as mentioned by Mr. Boyd Dawkins in his very interesting work, "Cave-Hunting." In the description as given in the latter it is said, "In eight out of thirty-four humeri the *fossa of the olecranon* was perforated."

[1 Both, in the humerus of a cat in the Warren Museum. - H.]

I think it will be evident at once to any anatomist that Mr. Darwin has confounded the *supra*-condyloid foramen with what may properly enough be called the *inter*-condyloid foramen — the perforation through the olecranon fossa. In M. Broca's cases, if Orro*ny* and Orro*uy* refer to the same cavern, the mistake is obvious, and it is hardly less apparent in the others. For in the first place, the "hook-like process" is not a foramen or a passage at all after the ligament which made it one has disappeared, as it must have done in all very old bones. In the second place, while the *supra*-condyloid *hooked process* is rare, the *inter*-condyloid *perforation* is far from uncommon, especially in certain races, as in our North American Indians, and, as it is said, in the Negro.

There are three specimens of the supra-condyloid process in the Warren Museum, and seven or more of the inter-condyloid perforation. There may be instances in which, in the human skeleton, the ossification of the ligament referred to in Mr. Turner's description renders the foramen permanent after the decay of the soft parts, but I have never seen one, nor do I find any such case recorded in the works which I have consulted. O. W. H.

A FEW REMARKS ON THE DATE IN OBITUARY NOTICES.

Mr. Editor. — There are one or two little practical points in composing an obituary notice to which the great majority of those who write worthy epistles in this line do not seem to give due importance. It is quite essential that we should know certainly the date at which the man figured in this life. The papers or magazines in which the death is recorded do not perpetually represent the present, — the *present* is ever becoming the *past*, — but the majority of those who write such notices too often ignore this important fact. If they say that the subject of the notice "died yesterday," or was "buried on the 25th inst.," that is all they seem to regard as important as to date, and then oftentimes they do not even date their own publication. Sometimes the date of death is given, and somewhere in the article the age of the person, directly or indirectly, — perhaps the age at a certain period: he was so many years old when he entered college, and he entered college at a certain time, etc., so that by considerable trouble of scanning the whole article and making various calculations, one engaged in taking note of these things for the public good can venture to make an approximate assertion that the existence of the individual thus honored with an obituary is represented in this life as being between two fixed dates. It may be asked. Why be particular about the date? We may ask, Why publish an obituary notice at all? If a thing of this kind is worth doing, it certainly is worth doing in the most complete manner possible, and it surely cannot be a very difficult thing for one who is well enough acquainted with his fellow-man to write his obituary notice to add in a conspicuous manner the date of birth and death. There are often many things to prove which hang on the mere date at which a man figures on this earth. If he be a doctor, we desire to know at what time he may have offered some contribution to science or the healing art. In making an index of these things for the use of the coming ages we should always place the individual as to date, but it is

not always possible to do this; not even half the time can we be as satisfactory in this particular as we should like, and we are often obliged to look through the whole of a long article and do considerable figuring simply to put before the world in plain black and white these important dates.

Once in a while we come across a practical person who, in connection with writing such a notice, makes it a point to state at the very beginning of the article the date of birth and death. This is as it should be, and is a copy which we wish that all who would record the life and works of their friends would follow.

It is a small matter with the writer at the time, but if he neglects it it becomes difficult and sometimes impossible from presented data to complete dates that may be highly desirable to have readily at hand. PHILO.

COMPARATIVE MORTALITY-RATES FOR THE WEEK ENDING DECEMBER 29, 1877

	Estimated Population, July 1, 1877.	Total Mortality for the Week.	Annual Death-Rate per 1000 for the Week.	Death-Rate for the Year 1876.
New York	1,077,228	474	22.88	27.46
Philadelphia	850,856	315	19.25	22.88
Brooklyn	527,830	208	20.49	24.31
Chicago	420,000	129	15.95	20.41
Boston	363,940	45	20.72	23.39
Providence	103,000	37	18.68	18.34
Worcester	52,977	19	18.65	22.00
Lowell	53,678	18	17.44	22.21
Cambridge	51,572	10	10.08	20.54
Fall River	50,372	23	23.74	22.04
Lynn	34,524	14	21.08	21.37
Springfield	32,976	8	12.62	19.69
Salem	26,739	11	21.39	23.57

OBITUARY. — Died, at Fitchburg, November 15, 1877, of capillary bronchitis, Dr. Alfred Miller.

At a meeting of the Fitchburg Society for Medical Improvement, held November 27, 1877, the following resolutions were adopted: —

Whereas, God in his providence has taken to himself one of our number.

Resolved, That while we mourn our loss, we bow submissively to the will of Him who doeth all things well.

Resolved, That in the death of Dr. Alfred Miller this society has lost an honored and eloved member, the profession an able and efficient laborer, the community a judicious, philanthropic citizen, the cause of education an energetic friend.

Resolved, That we tender our sympathy to the deeply afflicted family of our departed brother, and pray that our Heavenly Father may sustain and comfort them in their hour of sorrow.

Obituary. — Feeling that simple justice to the memory of the late Dr. Pratt, one of the most skillful physicians ever enrolled member of the Berkshire District Medical Society, demands a more extensive mention, will you allow space in your pages for this short article? Having graduated with the highest honors of his medical college, after a brief practice in one of the small towns of Berkshire County Dr. Pratt removed to Ravenna, Ohio, and soon obtained an excellent practice, and won an extensive reputation as a physician of remarkable ability, and also a most skillful surgeon. In the latter department especially he achieved more than a mere local reputation, and his services were often demanded at a distance of from sixty to a hundred miles. Finding that the climate of Ravenna did not agree with him, in June, 1858, he returned to his native town, Lanesboro', Mass. When he regained his health he resumed the practice of medicine, and soon rose to the very front rank in his profession in Western Massachusetts, which position he most ably filled until his death, last November. He visited in his daily ride patients in Lanesboro', New Ashford, Hancock, Stephentown, South Williamstown, Cheshire, Windsor, Pontoosic, and Pittsfield, and was often called in consultation far greater distances. He was a man of strong intellectual faculties and wonderfully retentive memory, and kept fully posted in all the discoveries in medicine and practice. He examined his patients critically and carefully, and his diagnosis of disease was unusually accurate. His constant, watchful attention was bestowed upon all, the rich and poor alike. No temptation to pleasure or to take the rest he sometimes so sorely needed (for his ride, embracing as it did some of the roughest portions of our mountainous Berkshire, was of necessity exhaustive) ever caused him for one day to desert his post by the bedside of the sick and suffering. Beneath what seemed to strangers a stern exterior was a heart as keenly alive to suffering and as tender in its sympathy as a woman's. Gifted with a strong intellect, polished and strengthened by a large range of reading and observation, and with remarkable conversational powers, he was always welcome.

He was a gentleman by nature and culture, — in the unswerving loyalty of his friendship, in his love of justice and all that was pure and noble, in his devotion to his family, and in his unsullied private character. Never was truer remark uttered than that by President Chadbourne in his funeral discourse: "This generation will never see his place filled." Dr. Pratt was a firm believer in the realities of the religion of Christ, although beset with doubts and fears, and seemingly unable to claim the promises for himself. In many households his place will remain forever vacant, and with sorrowful reverence will he be

> "Named softly as the household name
> Of one whom God hath taken."

Cheshire. P.

Erratum. — On page 15 of the last number, in the remarks of Dr. Curtis, "delirium tremens" should read "sleep."

Books and Pamphlets Received. — Dr. Edward Hammond Clarke. The Man and the Physician. A Sermon preached in the West Church, Boston, by C. A. Bartol. Boston: A. Williams & Co.

Spinal Irritation in Children as related to True and False Arthropathies. By V. P. Gibney, M. D. New York: G. P. Putnam's Sons. (Reprinted from the Transactions of the American Neurological Association.)

The Elements of Therapeutics. A Clinical Guide to the Action of Medicines. By Dr. C. Binz. Translated from the Fifth German Edition by Edward I. Sparks, M. A., M. B. Oxon. New York: William Wood & Co. 1878. (A. Williams & Co.)

Twenty-Second Annual Report of the Trustees of the State Lunatic Hospital at Northampton for the Year ending September 30, 1877.